

## US CLAIMS

1. A method for measuring the spin in an optical fibre by irradiating an optical fibre with light so as to form an interference pattern, characterized in that the ovality of the optical fibre, which results in a continuously changing interference pattern, is used for determining the spin in the optical fibre.

2. A method according to claim 1, characterized in that the interference pattern comprises the range between  $48^\circ$  and  $72^\circ$ , which range is obtained by irradiating the optical fibre with light in a direction perpendicularly to the direction of movement thereof.

3. A method according to claim 1, characterized in that the interference pattern is measured during the drawing process for producing the optical fibre from the molten preform, in particular at a drawing speed  $> 10$  m/s.

4. A method according to claim 1, characterized in that the spin measured from the continuously changing interference pattern is related to the functioning of the device that is used for imparting the spin to the optical fibre.

5. A method according to claim 4, characterized in that the device for imparting the spin to the fibre is disposed downstream of the device that continuously measures the interference pattern of the optical fibre.

6. A method according to claim 4, characterized in that said method comprises the following steps:

i) setting a set value in the device for imparting spin to the optical fibre,

ii) carrying out an interference pattern measurement on the optical fibre,

iii) calculating, on the basis of the measured interference pattern, a measured value which represents the amount of spin in the

optical fibre, and

iv) comparing the set value of i) with the measured value of iii) and, if necessary, adjusting the set value until the desired amount of spin in the optical fibre is achieved.

5 7. A method according to claim 4, characterized in that the

device for imparting spin to the optical fibre is a device comprising two pairs of wheels which rotate in opposite directions about the two different axes of rotation, between which wheels the optical fibre is passed, as a result of which spin is imparted to the optical fibre.

10 wherein the wheels are moved back and forth relative to one another in a direction substantially perpendicular to the optical fibre so as to roll the fibre alternately to the left and to the right between the wheel surfaces.